

at baseline compared to the NSAID group. After adjusting for these factors, no significant differences were observed in the rate of GI events (1% overall), rate of GI medication use (5%) total health care costs (mean = \$1712), or medical costs (mean = \$1513) after 1 year. Prescription drug costs were 38% and 51% higher for rofecoxib and celecoxib patients respectively compared to the NSAID group ($p < 0.0001$). **CONCLUSION:** In contrast to initial marketing information, in this observational study, we found no significant difference in GI-related outcomes or total health care costs between the two groups.

PAR7

HEALTH CARE UTILIZATION AND EXPENDITURE OF TWO PROGRAMS FOR OSTEOARTHRITIS OF THE KNEE AND HIP: ASSESSMENT AND IMPACT IN REAL-LIFE CONDITIONS

De Jong R¹, Hopman-Rock M², Tak E¹, Klazinga N³

¹TNO Quality of Life, Leiden, The Netherlands; ²TNO Quality of Life/TNO-VU University Medical Center Amsterdam, Leiden, The Netherlands; ³University Medical Centre, Amsterdam, The Netherlands

OBJECTIVE: To assess in real-life conditions after previous randomized controlled trials the impact on health care utilization and expenditure of two self-management programs for older adults with osteoarthritis (OA) of the knee and hip. **METHODS:** Eighteen primary health-care providers were recruited to carry out a Knee or Hip program. Study participants were older adults (>55 years) with diagnosed OA of knee or hip. Self-reported data were collected with pre-test/post-test questionnaires (consultation of the general practitioner, physiotherapeutic treatment, consultation of the medical specialist, and use of OA medication). Pre-test/post-test data of four health insurance companies were collected on expenditure for physiotherapy and OA medication. **RESULTS:** Providers delivered 20 Knee and 20 Hip programs. Background variables of program participants were comparable with background variables in the RCTs. Significant fewer participants of the Knee program ($n = 157$) reported receiving physiotherapy after completion of the program ($P = 0.00$). In the Hip program ($n = 132$), the self-reported frequency of visits to physiotherapists ($P = 0.00$) and medical specialists ($P = 0.03$) decreased. The self-reported use of OA medication had decreased in both programs ($P = 0.00$). No effect was observed for consultations of the general practitioner. The outcomes were comparable with the outcomes of the RCTs. Expenditure for physiotherapy and OA medication could not be assessed, due to difficulties in obtaining sufficient reliable data. Expenditure were not measured in the RCTs. **CONCLUSION:** Considering the limitations of the study, both programs indicate ecological validity as to health care utilization. Compared to the RCTs, the programs produced similar outcomes in real-life conditions. The combination of the self-reported reduction in the use of physiotherapy and the self-reported reduction in the use of OA medication indicate also improved OA symptom control. A guideline for accurate data collection on OA expenditure is recommended. Cost-utility and cost-effectiveness analysis is recommended, once large-scale dissemination in the primary health care system is realized.

PAR8

COST COMPARISON OF THE COMBINATION TRAMADOL PLUS PARACETAMOL VERSUS NSAIDS PLUS PROTON PUMP INHIBITORS IN THE TREATMENT OF OSTEOARTHRITIS IN THE NETHERLANDS

Liedgens H¹, Nuijten MJ², Poulsen Nautrup B¹

¹Gruenenthal GmbH, Aachen, Germany; ²Erasmus University, Rotterdam, The Netherlands

OBJECTIVES: Non-steroidal anti-inflammatory drugs (NSAIDs) are often used as first-line treatment in osteoarthritis (OA). Due to the increased risk of gastrointestinal (GI) side effects with NSAIDs, proton pump inhibitors (PPIs) are often prescribed concomitantly, but cannot entirely prevent these complications. Since the combination of the weak opioid tramadol plus paracetamol has shown to be an alternative treatment in OA we aimed to compare the costs of six months' treatment of OA with NSAIDs plus PPIs with the tramadol/paracetamol combination (Zaldiar®) in the Dutch health care setting. **METHODS:** A cost comparison of the direct medical costs was appropriate since both treatments have been shown to be similarly efficacious in treatment of OA pain of comparable intensity. We combined the Celecoxib Outcomes Measurement Tool (COMET) for evaluation of cost consequences of NSAIDs plus PPIs with a modified model for cost consequences of the tramadol/paracetamol combination presented previously. The NSAIDs under study were diclofenac and ibuprofen and the PPIs were omeprazole and pantoprazole, representing 75% and 85% of the respective market shares (by units) in The Netherlands. Probabilities were derived from published literature. Resource utilization data were obtained from published literature, Delphi panel and official price and tariff lists (Dutch costing manual). The perspective taken was that of the health insurance. **RESULTS:** Costs of six months' treatment of OA pain with the tramadol/paracetamol combinations were €244.45. Savings compared with NSAIDs plus PPIs treatment were €72.87. Taking into account the rare, but very cost-consuming, renal side effects of NSAIDs, savings were €414.79 for six months' treatment (costs of NSAIDs plus PPI treatment: €317.32, including renal side effects: €659.24). Sensitivity analyses confirmed the robustness of the model. **CONCLUSION:** The tramadol/paracetamol combination offers a cost-saving alternative treatment of OA that is not associated with severe GI or renal complications.

PAR9

A MODEL TO ESTIMATE HEALTH UTILITIES INDEX MARK 3 UTILITY SCORES FROM WOMAC INDEX SCORES IN PATIENTS WITH OSTEOARTHRITIS OF THE KNEE

Marshall DA¹, Grootendorst P², Pericak D¹, Bellamy N³, Feeny D⁴, Gooch K⁵, Frank C⁶, Torrance G¹

¹Innovus Research Inc, Burlington, ON, Canada; ²University of Toronto, Toronto, ON, Canada; ³University of Queensland, Brisbane, Queensland, Australia; ⁴University of Alberta and Institute of Health Economics, Edmonton, AB, Canada; ⁵Institute of Health Economics, Calgary, AB, Canada; ⁶University of Calgary, Calgary, AB, Canada

OBJECTIVE: To develop a model to translate WOMAC scores collected in clinical trials of patients with osteoarthritis (OA) into Health Utilities Index Mark 3 (HUI3) utility scores for application in economic evaluation. **METHODS:** Data from a previously published open-label randomized controlled trial of appropriate care with hylan G-F 20 vs. appropriate care without hylan G-F 20 in 255 outpatients with knee OA. We estimated linear regression models of HUI3 scores using various functions of WOMAC, demographics and clinical variables. Out of sample predictive performance of the models was assessed using the mean absolute error and several other criteria. **RESULTS:** The preferred model included WOMAC pain, stiffness, function subscales, and demographic variables; it accounted for almost 40% of the variation in the HUI3 utility scores. At the group level, absolute differences between predicted and actual overall HUI3 utility scores was <0.001 and not statistically significantly different from zero. **CONCLUSION:** A model appropriate for retrospective analyses of data sets in which utility scores were not collected was developed to estimate HUI3 scores from WOMAC